

ABSTRACT OF THE DISCLOSURE

An insulated gate bipolar transistor is disclosed, which comprises a first conductivity type base layer, a second conductivity type base layer and an emitter layer which are selectively formed in an upper surface of the first conductivity type base layer, a buffer layer and a collector layer which are formed on a back surface of the first conductivity type base layer.

A requirement of $d2/d1 > 1.5$ is satisfied, where $d1$

is a depth in the buffer layer, as measured from an interface of the buffer layer and the collector layer, at which a first conductivity type impurity concentration in the buffer layer shows a peak value,

and $d2$ is a shallowest depth in the buffer layer, as measured from the interface of the buffer layer and the collector layer, at which an activation ratio of the first conductivity type impurity in the buffer layer is a predetermined value.

10025744-122601